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EXAMINER

MOE, AUNG SOE

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 06/25/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/069,419

Applicant(s)
Shigeo Yoshida

Examiner
Aung Moe

Art Unit
2612



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Apr 11, 2003
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 30-32 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-10, and 30-32 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 4/11/03 is: a) ☒ approved b) ☐ disapproved by the Examiner
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 2612

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 4/11/03 have been fully considered but they are not persuasive.

Regarding claim 32, the Applicant alleged that "Claim 32 has been amended to recite *discriminating the image based on whether the size of image is large or small*". This feature is nowhere taught, disclosed or suggested in Roberts '219.

In response, the Examiner respectfully disagrees because Roberts '219 clearly shows that the size of the image is stored in the computer readable recording medium along with the photograph mode (i.e., Disk 50 of Fig. 2A), and furthermore, different digital bits 55 (i.e., the bit "00" indicated the size of the image data such that the fifty images are stored therein, and the bit "01" indicated the size of the image data such that twenty-five images are stored therein; see col. 5, lines 20-55) is stored in the recording medium (50) for indicating the size of image which is photographed in the photograph mode (i.e., Black & White/Color). Further, the computer 20 is capable of discriminating the image based on whether the size of image is large or small just by determining the digital bit 55 of the recording medium (50) so that proper decompression may be executed (i.e., col. 5, lines 50+, col. 9, lines 30+). In view of this, it is cleared that only reason for storing the digital bits 55 for indicating the size of image as shown in Fig. 2A is to discriminating the image on whether the size if large or small by the computer 20.

Art Unit: 2612

In view of the above, the Examiner asserts that claim 32 is anticipated by Roberts '219 for at least the reasons discussed above.

2. Applicant's arguments with respect to claims 1-4, 7-10 and 30-31 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 2612

4. Claim 32 is rejected under 35 U.S.C. 102(e) as being anticipated by Roberts et al. (U.S. 6,094,219).

Regarding claim 32, Roberts '219 discloses a computer readable recording medium (Fig. 2) in which a program to be executed by the computer (20) has been recorded, wherein said program comprises the steps of:

storing a photographing mode (i.e., noted the Format/Mode as shown in Fig. 2A) of a photographing apparatus (i.e., noted the camera of Fig. 2);

storing a size of the image which is photographed in said photograph mode (i.e., noted the Resolution data is a size of the image as shown in Fig. 2A; col. 5, lines 20+ of Roberts '219); and

discriminating the image based on whether the size of image is large or small (i.e., Fig. 2A & 6B; col. 5, lines 20-68 and col. 9, lines 30+).

5. Claim 32 is rejected under 35 U.S.C. 102(e) as being anticipated by Yamagata ' 106 (U.S. 6,263,106).

Regarding claim 32, Yamagata ' 106 discloses a computer readable recording medium (Fig. 3) in which a program to be executed by the computer (25) has been recorded, wherein said program comprises the steps of:

storing a photographing mode (i.e., noted the compressed/uncompressed modes; col. 4, lines 3+) of a photographing apparatus (i.e., noted the camera of Fig. 2);

Art Unit: 2612

storing a size of the image which is photographed in said photograph mode (i.e., noted the relative sizes of the image as shown in Fig. 3; col. 5, lines 20+); and

discriminating the image based on whether the size of the image is large or small (i.e., noted from Figs. 5-11, the controller 25 is capable of discriminating the sizes of the image base on the amount of the image stored in the memory area).

6. Claims 1, 2, 3, 7-8, 9-10 and 30-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Swanson et al. (U.S. 5,689,442).

Regarding claim 1, Swanson '442 discloses an electronic apparatus (i.e., noted the camera system 100 as shown in Figs. 1/5) comprising: image pickup means (the CCD video camera 12) for photographing an object and outputting an image signal; memory control means (Figs. 1, the element 44) for allowing said image signal to be stored into image memory means (18/92); and

selecting means for automatically selecting an image signal when said memory control means decides that the photographing is impossible because a remaining amount of said image memory means (18) is smaller than a predetermined value (i.e., the data management device 44 is capable of automatically selecting the stored image data from the memory 18 for transmitting if available space in the data storage device 18 reaches a critically low level, thus, it is cleared that in order to determine a critically low level of the storage device 18, the data management 44 must

Art Unit: 2612

determine a remaining amount of the image memory means 18 is smaller than a predetermined value as claimed; col. 6, lines 15+ and col. 10, lines 24+);

communicating means (Figs. 1 and 5, the element 70) for automatically transmitting the image signal stored in said image memory means when a predetermined condition (i.e., when the available space in the data storage device 18 reaches a critically low level; see col. 10, lines 25+) is satisfied so as to enable a new image signal to be stored into said image memory means (col. 7, lines 55+ and col. 10, lines 23+).

Regarding claim 2, Swanson '442 discloses further comprising image selecting means (i.e., see col. 6, lines 18+) for selecting an image signal from said image memory means (18) on the basis of a predetermined selecting condition (i.e., col. 6, lines 20+ and col. 10, lines 23+ of Swanson '442), and wherein said communicating means (i.e., the element 70) transmits said selected image signal (i.e., col. 7, lines 60+ and col. 10, lines 24+ of Swanson '442).

Regarding claim 3, Swanson '442 discloses wherein said predetermined selecting condition is a condition to select an old one of said stored image signals, and further comprising managing means (44/10) for managing photographing times of said image signals for the purpose of said condition (i.e., col. 6, lines 25-65).

Regarding claim 7, Swanson '442 discloses further comprising marking means (i.e., Noted the use of a timer 45) for adding a mark to the image signal which is outputted from said image pickup means (12), and wherein said predetermined selecting condition relates to the presence or absence of said marking (i.e., noted from the col. 6, lines 20+ of Swanson '442 that

Art Unit: 2612

in order to free-up space in the memory 18, the image stored in the memory 18 may be flagged with time data, so that the image presence with older time flags may be selected for transmitting to the remote storage 92).

Regarding claim 8, Swanson '442 discloses wherein said communicating means is wireless communicating means (i.e., col. 10, lines 5+ of Swanson '442).

Regarding claim 9, Swanson '442 discloses an image processing method comprising the steps of:

storing a photographed image signal into image memory means (i.e., Figs. 1 and 5; col. 3, lines 50+);

automatically selecting an image signal when a photographing is impossible because a remaining amount of said image memory means (18) is smaller than a predetermined value (i.e., the data management device 44 is capable of automatically selecting the stored image data from the memory 18 for transmitting if available space in the data storage device 18 reaches a critically low level, thus, it is cleared that in order to determine a critically low level of the storage device 18, the data management 44 must determine a remaining amount of the image memory means 18 is smaller than a predetermined value as claimed; col. 6, lines 15+ and col. 10, lines 24+); and

automatically transmitting the image signal stored in said image memory means so as to enable a new image signal to be stored into said image memory means (i.e., col. 6, lines 20+ and col. 7, lines 60+ and col. 10, lines 24+).

Art Unit: 2612

Regarding claim 10, Swanson '442 discloses a computer readable recording medium in which a program to execute a procedure by the computer has been recorded (Figs. 1 and 5, the elements' 44, 73; col. 6, lines 15+ and col. 7, lines 15+), wherein said procedure comprises the steps of:

storing a photographed image signal into image memory means (i.e., col. 6, lines 15+);
automatically selecting an image signal when a photographing is impossible because a remaining amount of said image memory means is smaller than a predetermined value (i.e., the data management device 44 is capable of automatically selecting the stored image data from the memory 18 for transmitting if available space in the data storage device 18 reaches a critically low level, thus, it is cleared that in order to determine a critically low level of the storage device 18, the data management 44 must determine a remaining amount of the image memory means 18 is smaller than a predetermined value as claimed; col. 6, lines 15+ and col. 10, lines 24+); and
automatically transmitting the image signal stored in said image memory means so as to enable a new image signal to be stored into said image memory means (i.e., col. 6, lines 20+ and col. 7, lines 60+ and col. 10, lines 24+).

Regarding claim 30, Swanson '442 discloses a computer readable recording medium in which a program to execute by the computer has been recorded (Figs. 1 and 5, the elements' 44, 73; col. 6, lines 15+ and col. 7, lines 15+), wherein said program comprises the steps of:

storing an image signal photographed by image pickup means (12) into image memory means (Fig. 1, col. 6, lines 15+);

Art Unit: 2612

detecting a remaining amount of said image memory means (as shown in Fig. 1 that the data management circuit 44 of the controller 10 is capable of determining the amount of image data stored in the storage means 18; col. 6, lines 15+, col. 7, lines 15+ and col. 10, lines 30+);

discriminating whether the photographing by said image pickup means can be performed or not on the basis of said detected remaining amount (i.e., as shown in Figs. 1 and 5, that the data management circuit 44 of the controller 10 is capable of discriminating the photographing condition of the camera based on the status of the storage means 18 as detected; col. 6, lines 15+, col. 7, lines 15+ and col. 10, lines 25+);

automatically selecting an image signal on the basis of a predetermined selecting condition (i.e., when the storage area of the camera is fully loaded is determined; see col. 7, lines 15+ and col. 10, lines 25+) from said image memory means (18) when a result of said discrimination indicates that the photographing is impossible (i.e., the data management device 44 is capable of automatically selecting the stored image data from the memory 18 for transmitting if available space in the data storage device 18 reaches a critically low level, thus, it is cleared that in order to determine a critically low level of the storage device 18, the data management 44 must discriminate the photographing condition of the camera on the basis of the detected remaining amount of the storage area in the storage means 18; col. 6, lines 15+ and col. 10, lines 24+); and

transmitting said selected image signal (i.e., col. 7, lines 55+ and col. 10, lines 30+).

Art Unit: 2612

Regarding claim 31, Swanson '442 discloses a computer readable recording medium in which a program to execute by the computer has been recorded (Figs. 1 and 5, the elements' 44, 73; col. 6, lines 15+ and col. 7, lines 15+), wherein said program comprises the steps of:

storing an image signal photographed by image pickup means into image memory means (Fig. 1, the elements' 18 and 92; see col. 6, lines 15+);

detecting a remaining amount of said image memory means (as shown in Fig. 1 that the data management circuit 44 of the controller 10 is capable of determining the amount of image data stored in the storage means 18; col. 6, lines 15+, col. 7, lines 15+ and col. 10, lines 30+);

discriminating whether the photographing by said image pickup means can be performed or not on the basis of said detected remaining amount (i.e., noted that based on the capacity of the storage device 18, the controller 10 is capable of discriminating the capacity of the storage 18 to perform the photographing and storing of the new image data therein; col. 6, lines 15+, col. 7, lines 15+ and col. 10, lines 25+);

automatically selecting an image signal on the basis of a predetermined selecting condition (i.e., the storage device 18 is full) from said image memory means (18/92) when a result of said discrimination indicates that the photographing is impossible (i.e., the data management device 44 of the controller 10 is capable of automatically selecting the stored image data from the memory 18 for transmitting if available space in the data storage device 18 reaches a critically low level, thus, it is cleared that in order to determine a critically low level of the storage device 18, the data management 44 of the controller 10 must discriminate the

Art Unit: 2612

photographing condition of the camera on the basis of the detected remaining amount of the storage area in the storage means 18; col. 6, lines 15+ and col. 10, lines 24+); and

processing said selected image signal and supplying the processed image signal to said image memory means (i.e., in order to transmit the selected image signals from the storage device 18 to the remote storage device 92 via a transceiver 70, the selected images must be processed by the control processor 10, e.g., an encryption process by an encryption circuit 72, before supplying to the remote storage 92; see col. 10, lines 25-68).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson '442 in view of Sono (U.S. 5,829,044).

Regarding claim 4, it is clear from the teaching of Swanson '442 that the controller (i.e., the control processor 10) is capable of managing the data access frequencies of the stored image signals from the memory means (18) when the image data are either accessed or written from the

Art Unit: 2612

image memory means (18) for the purpose of selecting or transmitting to the remote storage (92) to free up the image memory space for the new image data to be stored therein (i.e., see col. 6, lines 15+, col. 7, lines 15+ and col. 11, lines 2+).

In addition, although Swanson '442 does not explicitly state that the image data stored in the image memory means is selected for transmitting based on the determination that an accessing frequency of the stored image is small. In other word, the images are not view or use frequently may be selected and transmitted to free up the storage capacity of the image memory means. Such limitations are considered obvious over the teaching of Swanson '442. For example, the sole purpose for transmitting the selected image data form the image memory (18) to the remote storage means (92) is to increase the storage capacity of the image memory means (18) at the camera unit (i.e., see col. 10, lines 25+ of Swanson '442) by removing the age or staleness of the images stored at the storage means (18), thus, it is obvious that if the image memory means (18) is mainly occupied with the age or staleness images in which are never accessed for viewing (i.e., less frequency), the image memory means (24) may be hindered to store the new captured image data into the image memory means (24).

In order to overcome the above-mentioned problem, an obvious solution is to remove (i.e., transmit) the less frequently used or access image form the image memory (18) and this is clearly well-known in the art as evidenced by Sono '044. In particular, Sono '044 clearly teaches that it is conventionally well-known in the art to use managing means for managing accessing frequencies of the stored image signals (i.e., see Figs. 2 and 3; col. 5, lines 30+) so that this

Art Unit: 2612

information may be used to secure the empty area in the storage means by selecting a condition in which an accessing frequency is small from the stored data signals (i.e., col. 7, lines 5-25).

Therefore, having the system of Swanson '442 in which clearly suggested that the selected images stored in the image memory means (18) may be transmitted for freeing up the age or staleness of the image data from the memory space for the new image data to be stored therein (i.e., see col. 6, lines 16+ and col. 7, lines 55+ of Swanson '442) and then given the well-established teaching of Sono '044 for selecting a data with less accessing frequency to secure the empty area in the storage means, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Swanson '442 by providing managing means as taught by Sono '044 to select an image signal in which an access frequency is small (i.e., the image data previously stored in the image memory is least recently accessed) from the stored image signals and this would allow the camera user to take as many pictures as desired without worrying about running out of image memory capacity by conveniently securing the empty area in the storage means as suggested by Sono '044.

Art Unit: 2612

9. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagata (U.S. 6,263,106) in view of Takiyama et al. (U.S. 6,243,108).

Regarding claim 31, Yamagata ' 106 discloses a computer readable recording medium in which a program to execute by the computer has been recorded (see Figs. 2 and 4-8, 10-11 and 13), wherein said program comprises the steps of:

storing an image signal photographed by image pickup means into image memory means (i.e., Fig. 4; col. 4, lines 50+); detecting a remaining amount of said image memory means (noted that Figs. 5/6, 10/11 show that the controller 25 is capable of determining the remaining capacity of the memory card; see col. 2, lines 14+ and col. 7, lines 35+);

discriminating whether the photographing by said image pickup means can be performed or not on the basis of said detected remaining amount (i.e., noted that based on the capacity of the memory card, the controller 25 is capable of discriminating the capacity of the memory Card to perform the photographing and storing of the new image data; col. 1, lines 35+, col. 2, lines 1-40, col. 7, lines 35+);

selecting an image signal (i.e., Fig. 12, the file No. 5) on the basis of a predetermined selecting condition (i.e., the memory card 16 is full) from said image memory means when a result of said discrimination indicates that the photographing is impossible (i.e., see Fig. 10-12; col. 10, lines 15+); and processing (i.e., recompressing) said selected image signal (i.e., Fig. 12, the file No. 5) and supplying the processed image signal to said image memory means (i.e., as shown in Figs. 10-12 that if the controller 25 of the camera is determined that the storage area of

Art Unit: 2612

the memory card 16 is not enough to store the additional image data, then the previously stored image data, such as low-compression image data of file No.5, from the memory card is selected by the controller 25 so that this selected image data may be recompressed and supplied to the image memory card 16, thus, the remaining capacity of the memory card 16 is increased, and it becomes possible to store additional image data files as shown in Fig. 12).

Furthermore, it is noted that although Yamagata ' 106 shows a user to select images data (i.e., manual selection), Yamagata ' 106 does not explicitly stated the use of automatically selection as amended in present claimed invention.

However, it is noted that the use of automatic selection means is well-known in the art as evidenced by Takiyama '108. In particular, Takiyama '108 teaches the use of selecting means for automatically selecting an image signal on the basis of a predetermined selecting condition from the image memory means (Figs. 1 and 3; the elements' 1 and 4) when a result of the discrimination indicates that photographing is impossible (i.e., see col. 2, lines 5+ and col. 3, lines 10-58).

In view of this, it would have been obvious to one having been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yamagata ' 106 by providing automatically selecting means as taught by Takiyama '108 in order to automatically select the stored image data from the image memory means so that it would enhance the user's convenient and further provide a free space in the image memory for storing the new image data therein as suggested by Takiyama '108.

Art Unit: 2612

Allowable Subject Matter

10. Claims 5 and 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2612

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Aung S. Moe** whose telephone number is **(703) 306-3021**. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Wendy Garber**, can be reach on (703) 305-4929.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the customer service number **(703) 306-0377**.

A. Moe

June 23, 2003


AUNG S. MOE
PATENT EXAMINER